## Thursday, September 16, 2010

TO: Marlene H. Dortch, Secretary Federal Communications Commission 445 12<sup>th</sup> Street, S.W. Washington, D.C. 20554

From:

Cielo Systems International 1001 Main St. Suite 204 Lubbock, Texas 79401 806-977-9001 ext 101 806-763-1945 fax mg@cielosystems.net

Re: TV White Spaces

ET Docket Nos. 04-186 and 02-380

Dear Ms. Dortch:

My company, Cielo Systems, provides equipment and services for wireless broadband service in across the United States. As Value Added Reseller and Systems Integrator to the wireless industry, our customers and networks rely on unlicensed spectrum to deliver broadband services to consumers where nearly none have any broadband choices. We built networks across the United States using devices authorized under Part 15 rules the FCC adopted to open up 900 MHz, 2.4 GHz and 5 GHz spectrum for unlicensed broadband device.

Cielo Systems is very interested in utilizing television white spaces so that our customers can greatly expand and improve service to their current and future areas. Our customers are constantly faced with issues such as interference with other networks, limited penetration of signal, and limited range. This is insufficient technology, not only today's applications, but the future growth of the National Broadband Plan. We are committed to developing, selling, and deploying this frequency as soon as it is allocated.

I am pleased that the FCC will be acting on TV white space petitions for reconsideration in the near future. There are several proposals that would help us to deploy service:

First, the FCC should allow WISPs to operate using base station antennas mounted higher than 30 meters, and we should be allowed to install customer antennas (CPE) at heights below 10 meters. If we could increase our base station antenna height to 100 meters, we could cover three times more area with a base station and reduce our equipment, tower acquisition and tower lease fees by a large amount – an amount that could be the difference between deploying and not deploying in an area. We support the WISPA and Motorola proposals to increase base station height. By removing any minimum CPE height restrictions, we would not have to put tall masts on residences and we would be able to provide service at a lower cost. Most potential customers are unable to afford these high cost installation requirements.

Second, we believe we should be allowed to operate with power in excess of 4 Watts EIRP in rural areas. As is the case with tower height, operating with higher power will give us a greater coverage area and we will not need to spend as much money on infrastructure.

Third, we are very concerned about a proposal made by FiberTower and others to license white space spectrum for point-to-point wireless backhaul. Not only would adopting this proposal take six channels (36 MHz) and perhaps more channels away from us, but WISPs also would have to protect these licensed links. Moreover, channels and areas far beyond the links would be blocked because the signals from the licensed links would overshoot the path and the endpoints. This is due to the low-cost, low-gain antennas FiberTower wants to use. We also would not deploy if a licensed point-to-point user could come along later and put us out of business with a licensed link. We support the views expressed by WISPA in their September 8 letter and ask the FCC to reject the FiberTower proposal. We feel that already available spectrum should be continued to be used for these applications in the 6 GHz, 11 GHz, 18 GHz and 23 GHz bands.

We welcome any further questions about these issues. Feel free to contact us at any time.

Sincerely,

Mike Goicoechea

VP of Operations